Alarm IO Control Unit

User Manual

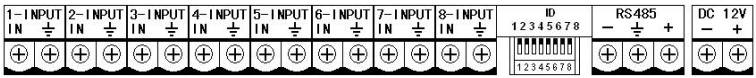
（V1.0）

Interface Introduce

1.Power: indicator light of power

Code: indicator light of Communication

2.Alarm Input: 8 ports for alarm input



IN: the port for alarm signal input

⏚: immonality port

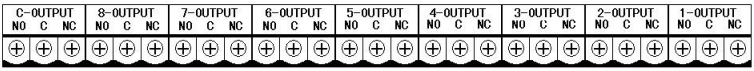
ID: the ID number of IO unit

RS485: the port of RS485 communication

DC 12V: the port of DC 12 volt input

ALARMS IN：indicator light of alarm in

3. Alarm output: 8 ports relay output


C-OUTPUT NO C NC
8-OUTPUT NO C NC
7-OUTPUT NO C NC
6-OUTPUT NO C NC
5-OUTPUT NO C NC
4-OUTPUT NO C NC
3-OUTPUT NO C NC
2-OUTPUT NO C NC
1-OUTPUT NO C NC

OUTPUT: relay output

NO: pot of relay continuous opening

NC: pot of relay continuous closing

C: relay commonality port

C-OUTPUT: relay commonality output port ALARMS

OUT：indicator light of relay output

Functions

1.Alarm input

There are 8 ports for alarm in. I will trigger alarm whether the signal line is short circuit or open circuit. And the indicator light will show red on alarm. It closes the indicator light of alarm when stop alarm.

2. Relay output

There are 8 ports of relay output and one port of commonality relay output. The unit can control every relay output.

3. Indicator light

Input: 8 indicator lights relate with 8 ports of alarm in. It will open the light on alarm in. For example, the NO.1 light will be red when the first port is alarming in.

Output: 8 indicator lights relate with 8 ports of relay out. It will open the light on relay out.

CODE: This light twinkles about every second. It shows the unit works fine. If the light twinkles fast, it shows the unit is receiving the data.

4. Connecting other unit

RS485 can transfer the data to long way, One DVR can connect many IO units thru RS485.

Configuration

There are 8 ID numbers of binary system in IO unit.

The value is 1(ON) if you press down the ID. The value is 0(OFF) if you put up the ID.

1. The table of ID number and unit function

You can configure the work state of unit through adjusting the ID number 1 and 2. The value is 1(ON) on pressing down and the value is 0(OFF) on putting up.

NO	ID Number 1	2	Unit function
1	0	0	The state of DVR controlling unit It is the default state.
2	1	0	It relays out automatic on alarm in. it has 1 minute delay.
3	0	1	
4	1	1	The state of testing unit

2.The table of ID number and unit address

You can configure the address of unit with adjusting the ID number 5,6,7 and 8. The value is 1(ON) on pressing down and the value is 0(OFF) on putting up.

NO	ID Number 5 6 7 8	Address	NO	ID Number 5 6 7 8	Address
1	0 0 0 1	01	*9*	1 0 0 1	09
2	0 0 1 0	02	*10*	1 0 1 0	10
3	0 0 1 1	03	*11*	1 0 1 1	11
4	0 1 0 0	04	*12*	1 1 0 0	12
5	0 1 0 1	05	*13*	1 1 0 1	13
6	0 1 1 0	06	*14*	1 1 1 0	14
7	0 1 1 1	07	*15*	1 1 1 1	15
8	1 0 0 0	08	16	0 0 0 0	16

3. IO unit testing

You can test the unit port thru adjusting the ID number from 1 to 6. The value is 1(ON) on pressing down and the value is 0(OFF) on putting up.

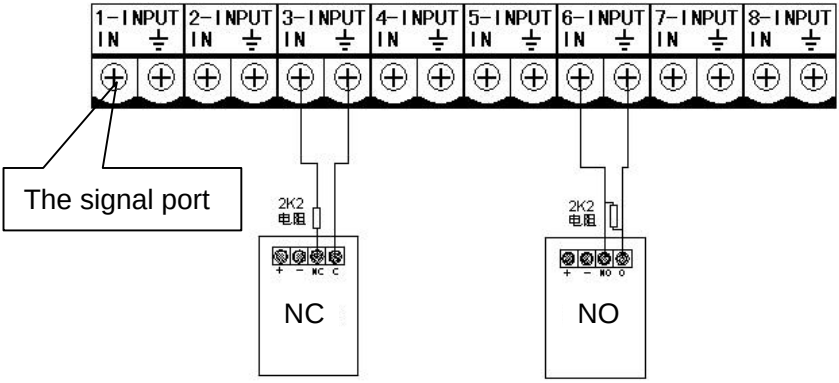
NO	ID Number 1 2 3 4 5 6 7 8	Test Port	NO	ID Number 1 2 3 4 5 6 7 8	Test Port
1	1 1 X X X 0 0 0	1	*5*	1 1 X X X 1 0 0	5
2	1 1 X X X 0 0 1	2	*6*	1 1 X X X 1 0 1	6
3	1 1 X X X 0 1 0	3	*7*	1 1 X X X 1 1 0	7
4	1 1 X X X 0 1 1	4	*8*	1 1 X X X 1 1 1	8
9	1 1 X X 1 1 1 1	Commonality port			

Connecting Equipment

1. Alarm IN

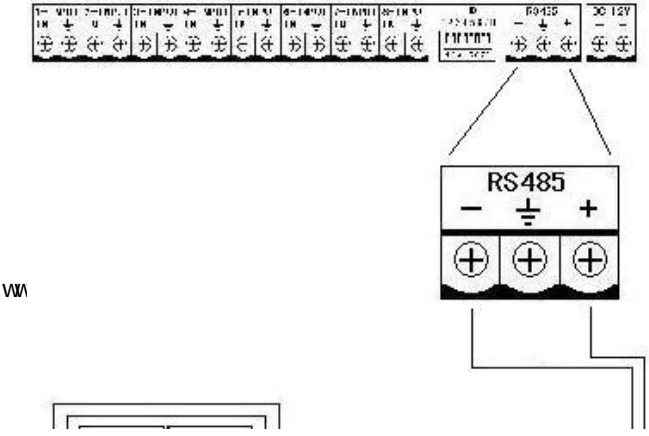
   The unit has 16 ports for alarm in. Every 2 ports are one group of alarm in. The signal line

connects to left port in the group. Following is a picture that shows how to connect to sensor or other device. You can find the 2.2k resistance in the box.



2. Relay out
   The unit has 27 ports for relay out. Every 3 ports is one group of relay out.

3. Communication with DVR
   It communicate with DVR thru RS232-RS485 converter.



specification

Power:	DC12V 10W
Alarm IN:	NC or NO
Relay Out:	NC or NO
Relay power:	8A/DC24V or 3A/AC220V
Temperature:	-1 -
Humidity:	¡Ö90¨ GRH
Dimension:	193(L)×120(W)×30(H)mm^3